WO 2005/070452 PCT/US2005/000482

We claim:

1. A method for reducing the somatic cell count in milk, comprising administering to a mammal an effective amount of a composition comprising a toxin.

- 2. A method for increasing the quality of milk produced by mammals, comprising administering to a mammal an effective amount of a composition comprising a toxin.
- 3. The method of claim 1 or 2, wherein the mammal has a somatic cell count of greater than 257,000 per ml of milk before administration of the toxin.
- 4. The method of claim 1 or 2, wherein the mammal is *Bos taurus*.
- 5. The method of claim 1 or 2, wherein the toxin is a staphylococcal toxin or a streptococcal toxin
- 6. The method of claim 5, wherein the streptococcal toxin is streptococcal pyrogenic exotoxin A or streptococcal superantigen.
- 7. The method of claim 1 or 2, wherein the toxin is a type A, B, C, D, E, G, or H staphylococcal enterotoxin.
- 8. The method of claim 7, wherein the toxin is staphylococcal enterotoxin C (SEC).
- 9. The method of claim 1 or 2, wherein the toxin is a mutant toxin.
- 10. The method of claim 9, wherein the toxin is mutant staphylococcal enterotoxin C1-12 (SEC1-12) (SEQ ID NO: 17).

WO 2005/070452 PCT/US2005/000482

11. The method of claim 9, wherein the mutant toxin has reduced lethality, reduced emetic properties, or reduced pyrogenicity as compared with the wild-type toxin.

- 12. The method of claim 9, wherein the toxin has a modified disulfide loop region.
- 13. The method of claim 12, wherein at least 40% of the amino acid residues within the disulfide loop region are deleted.
- 14. The method of claim 5, wherein the toxin is an antigenic portion of a staphylococcal enterotoxin.
- 15. The method of claim 1 or 2, wherein about 0.1 mg to about 10.0 mg of the composition is administered.
- 16. The method of claim 15, wherein about 4.0 mg of the composition is administered.
- 17. The method of claim 1 or 2, wherein a plurality of doses of a composition comprising a toxin is administered.